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EXAMINER

BROWN, RUEBEN M

ART UNIT

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2623

NOTIFICATION DATE

DELIVERY MODE

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ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/075,152 | <b>Applicant(s)</b><br>MORLEY ET AL. |  |
|                              | <b>Examiner</b><br>REUBEN M. BROWN   | <b>Art Unit</b><br>2623              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06/27/2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 3-14, 16-41, 43-47, 49-55, 59-82, 84-108 & 110-121 & 123-158 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-14, 16-41, 43-47, 49-55, 59-82, 84-108 & 110-121 & 123-158 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. The Office Action mailed 1/30/2008 did not consider newly added claims 151-158. Therefore, the following Office Action is mailed considering the instant newly added claims, with a new period of response.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-8, 14, 20-21, 43, 46-47, 49-55, 59-61, 70, 72-82, 87-88, 110, 113-121, 123-126 & 151-158 are rejected under 35 U.S.C. 103(a) as being unpatentable Buhro, (U.S. Pat # 5,440,336) in view of Chadda, (U.S. Pat # 6,266,817), Gulla (WO 97/06637) & W. Fuller (U.S. Pat # 5,818,512) hereinafter referred to as W. Fuller.

Considering amended claim 1, the claimed apparatus for distribution of image to a plurality of locations, comprising:

*'means for independently receiving at each of the plurality of viewing locations, at least one compressed image file, which is associated with at least one corresponding image program and a plurality of compressed audio files which are associated with a plurality of corresponding audio programs for presentation'* reads on the combination of Buhro & Chadda. Buhro is specifically dedicated to teaching transmission and delivery of compressed movie(s) material to a location that provides a local distribution feature, for instance using a satellite system 120, (Fig. 1; col. 3, lines 41-67; col. 2, lines 4-35). These movies are then stored in a digital storage unit 160 before redistribution to at least one of a plurality of decoder devices 170, 172, 174 & 176 or alternatively 270, 272, 274 & 276 (see Fig. 1; Fig. 2A col. 4, lines 25-48; col. 5, lines 5-67). As for the claimed *'independently'* Buhro does not explicitly discuss that the image & audio may be independently transmitted and received. However, Chadda teaches a system that stores the audio & video components to a program separately and also transmits/receive them separately as well, see col. 4, lines 52-65; col. 11, lines 42-52. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Buhro to independently transmit/receive audio & video components to a program, for the desirable benefit of allowing for differences in processing needs of the audio, as opposed to video, as taught by Chadda (col. 8, lines 52-65).

As for the specifics of a *'plurality of compressed audio programs'*, Chadda teaches that the audio files may at least be stored and/or transmitted as either low quality or high quality tracks, which reads on the claimed subject matter, see col. 11, lines 26-42.

As for the additionally claimed *'encryption'*, Official Notice is taken that at the time the invention was made, encryption/decryption was old in the art, and was a well known technique for maintaining privacy of transmitted information. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Buhro with the well known feature of encryption/decryption for the desirable improvement of ensuring that only the authorized receivers are able to access and view the transmitted information.

*'the at least one compressed and encrypted image file and the plurality of compressed encrypted audio files are associable using at least one identifier for each of the encrypted image file and the plurality of audio files'*, reads on the frame sequence number, time stamp used to synchronize the audio & video, see Chadda, col. 8, lines 47-58; col. 12, lines 50-67.

Furthermore, since the audio & video information is transmitted as MPEG stream, it would have been obvious for one of ordinary skill in the art to use the well known MPEG protocol/labels of program\_ID or event\_ID, in order to associate the corresponding audio & video with a particular program including header information that identifies them with a particular program.

Regarding the further claimed feature of *'means for independently storing in a storage system at each of the viewing locations the compressed and encrypted image and audio files'*, reads on the combination of Buhro & Chadda.

*'means for independently distributing the compressed and encrypted image and audio files to at least one auditorium at each of the plurality of viewing locations based at least in part on the at least one identifier'; 'means for independently receiving the compressed and encrypted image & audio files in each auditorium'; 'means for independently decrypting the compressed & encrypted image & audio files in each auditorium, resulting in at least one compressed image file and a plurality of compressed audio files'; 'means for independently decompressing the compressed image & audio files in each auditorium, resulting in the at least corresponding image program and the plurality of corresponding audio programs'*, are also met by the combination of references. Specifically Chadda teaches that the audio & video may be independently received/stored and processed (Fig. 1). Furthermore, Buhro teaches that all of the features of the decoding/decompression technology (i.e., MPEG decoder card) may be located at each decoder 170, 172, 174 & 176, (Fig. 1; Fig. 2A; col. 4, lines 36-67) instead of being centrally located at the server. Since Buhro teaches that the received programming may be distributed to and decoded by a plurality of decoders, the claimed feature of plurality of auditoriums is met by the location of the decoders in Buhro.

*'at least one projection system and sound system in each auditorium for receiving the decrypted and decompressed image files and audio files, respectively, presenting the image and*

*audio information in synchronization*’ Buhro does not explicitly discuss that the local video distribution network may be a cinema or theatre having a projection system. Nevertheless, Gulla provides a teaching of transmitting a motion picture via a satellite transmission to a cinema-hall, which may include a multi-room cinema hall, see page 16, lines 11-16. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Buhro & Chadda to provide a projector, for the desirable benefit of displaying the transmitted video to a larger audience of viewers at a particular site and to provide a wider variety of content to a diversity of audiences, as taught by Gulla, page 2, lines 1-14.

As for the amended claimed features of *‘distributing the stored images to a plurality of theater systems at at least one preselected times’*, the references do not discuss the display procedure at such a detail. However, W. Fuller teaches that the video programming maybe distributed at “prescheduled times”, (col. 10, lines 50-67) which reads on the subject matter. The claimed “preselected offset times”, also reads on pre-scheduled times disclosed in W. Fuller. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Buhro & Chadda, with the feature of presenting a video program at a pre-selected time, as taught by W. Fuller, at least for the desirable advantage of a system with more flexibility which allows the operator to have the instant video program displayed without having to manually start the process at each display time.

*‘at least one sound system in each auditorium for receiving the plurality of corresponding audio programs and selectively playing at least one of the plurality of*

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*corresponding audio programs with the presented at least one corresponding image program*’ is met by the disclosure of Chadda, col. 11, lines 26-60.

Considering claims 3 & 72, Chadda teaches that separate decoder for audio & video and that these decoder may require separate memory, which would read on the claimed, ‘*non-contiguous*’, col. 9, lines 1-61

Considering claims 4-6 & 73-75, Gulla teaches that the video content may at least be compressed in MPEG-1 or MPEG-2, which reads on the claimed ‘*variable compression and transmission of audio & video files, that are remotely compressed*’, page 8-page 9. Furthermore, the claimed encryption was address above in the rejection of claims 1 & 70.

Considering claims 7 & 76, the associated audio & video streams in Chadda, use an identifier to synchronize audio with associated video, col. 9, lines 1-5& col. 12, lines 49-65.

Considering claims 8 & 77, the claimed subject matter reads on the disclosure in Buhro that the server may store multiple audio channels, Fig. 2A.

Considering claims 78-79, the subject matter reads on Chadda, Fig. 1.

Considering claim 80, see Chadda, col. 2, lines 55-67.



Considering claim 81, Chadda teaches a computerized workstation, SparcStation 20, col. 14, lines 44-50.

Considering claims 14 & 82, the claimed subject matter reads on the combination of Buhro & W. Fuller, as discussed above in claims 1 & 70.

Considering claims 20-21 & 87-88, Official Notice is taken that placing watermarks in video images was very well known in the art at the time the invention was made. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Buhro, to include watermarking at least for the desirable advantage of additional security measures.

Considering claims 43 & 110, Buhro is based on programming being ordered.

Considering claims 46-47 & 113-114, as for the claimed feature of simultaneously or staggering the time of delivery to some of the cinema halls, Official Notice is taken that at the time the invention was made, it was well known to provide video information to a plurality of destinations according to a schedule. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Buhro & Gulla to transmit video data to a plurality of different auditoriums within a cinema hall, according to a schedule at least for the desirable improvement of a more flexible system, since Buhro discusses synchronous & asynchronous VOD.

Considering claims 49-50 & 115-116, the claimed subject reads on the combination of Buhro and W. Fuller, which teaches a central storage system within a particular local system. W. Fuller shows a disk array 610, within the video server 202, see Fig. 6.

Considering claims 51-52 & 117-118, even though W. Fuller discloses the use of a disk array 610 to store movie data, striping is not specifically taught. Nevertheless, Official Notice is taken that at the time the invention was made, striping was old in the art. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to utilize striping, at least for the improvement of increased efficiency in off-loading.

Considering claims 53 & 119, W. Fuller teaches monitoring the movies ordered by subscribers, at least for billing purposes, col. 10, lines 59-67.

Considering claims 54-55, 59-60, 120-121 & 123-125, Buhro (Fig. 1; col. 4, lines 36-68; col. 6, lines 4-55) & W. Fuller is directed to distribution of video data in a local environment, col. 9, lines 28-65; col. 10, lines 11-50, which reads on the claimed '*theater management system*'. Furthermore, W. Fuller teaches that the video content may be delivered according to a schedule, which reads on '*programmable control*'.

Considering claims 61 & 126, the claimed subject reads on the use of MPEG, which is taught by Buhro & W. Fuller.

Considering claim 70, the amended claimed method of distribution of image and audio information to viewing locations, comprise method steps that correspond directly with subject matter mentioned above in the rejection of claim 1, and is likewise treated.

Considering claim 151, the claimed elements of a digital cinema system that correspond with subject matter mentioned above in the rejection of claims 1 & 70, are likewise treated. As for the additionally claimed, *'means for compressing the image & audio information segregated in time'*, the MPEG compression algorithm discussed in Buhro & Chadda (col. 8, lines 36-65) inherently meet the claimed subject matter, since the data is given time stamps for the purpose of synchronization.

*'means for transmitting the image & audio information segregated in time'* also reads on the transmitter in Buhro & Chadda, since data is transmitted as an MPEG stream, whereas in Chadda (col. 11, lines 26-55) image & audio data is transmitted separately.

*'at least one theater system, which receives the transmitted image & audio information and programming material, comprising means for selectively storing the transmitted programming material and means for decoding the transmitted image & audio information'*, reads on Gulla page 8, lines 10-25; page 9, lines 3-28; page 11, lines 26-28; page 12, lines 1-28.

*'a hub coupled to the theater management system, comprises means for adjusting the compression or transmission system when the transmitted image & audio system has been determined to be of poor quality'*, is broad enough to read on the disclosure in Gulla that when the quality of the transmission is poor that the system substitutes the packets detected as poor, see page 8, lines 10-25; page 10, lines 10-22; page 13, lines 14-22.

Considering claim 152, Gulla teaches adjusting the transmission rate and/or compression rate, based on the desired image quality, which is a function of the detection of poor quality due to loss packets, see page 8, lines 10-24; page 10, lines 10-25.

Considering claims 153-155, Official Notice is taken that at the time the invention was made, the techniques of adjusting signal transmission power, re-sending loss or missed packets and interrupting data transmission based on detected loss of transmitted data was old in the art. It would have been obvious for of ordinary skill in the art at the time the invention was made, to modify Buhro with the well known technology of adjusting signal transmission power, re-sending loss or missed packets and interrupting data transmission based on detected loss of transmitted data, for the improvement of providing a higher level of quality of service, since loss of data is a well known phenomena, especially in satellite data transmission systems.

Considering claims 156-158, see Gulla, page 5, lines 10-14; page 8, lines 10-25; page 10, lines 10-22; page 13, lines 14-22; page 14, lines 21-25.

4. Claims 16-19, 44-45, 84-86 & 111-112 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buhro, in view of Chadda, Gulla & W. Fuller, and further in view of Banker, (U.S. Pat # 6,005938).

Considering claims 16-17, 44, 84 & 111, Buhro does not teach receiving encrypted data at separate time from the audio/video. Nevertheless, Banker discloses transmitting a session key at a time separate from the encrypted information, col. 1, lines 37-67. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Buhro with the feature of transmitting decryption or cryptographic key information at a separate time from the audio/video information, as taught by Banker, at least to ensure that the information is at least received before the actual encrypted data.

As for claim 44, even though Banker teaches decryption, the above references do not specifically teach providing a decoder/decrypter for each image projection system within the system. It would have been obvious and one of ordinary skill in the art at the time the invention was made, would have been motivated to modify Buhro to provide a decrypter for each image projection system, at least for the desirable advantage of a more distributed system that reduces bottlenecks, since it would not be required to decrypt all of the video data at a central location.

Considering claims 18 & 85, Banker teaches that the system includes a time interval for the use of the session key, which avoids the receiver having indefinite access to encrypted data, see col. 2, lines 24-665 & col. 3, lines 5-30 & col. 4, lines 40-58

Considering claims 19 & 86, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the combination of Buhro & Banker to overwrite invalid decryption key information for the desirable advantage of re-using its memory, thereby conserving storage capacity at the receiver.

Considering claims 45 & 112, the Buhro reference does not discuss any intrusion detection algorithm. Nevertheless Gulla, which is in the same field of endeavor of movie distributed to remote cinema halls, teaches protection the recording apparatus with an intrusion detection means that includes a self-destruction of the memory content, when an intrusion is detected, page 13, lines 6-13. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Buhro with the technique of detecting intrusion and destroying data upon an intrusion as taught by Gulla, for the desirable improvement of ensuring the movie data will only be accessed by authorized users of the instant movie data.

5. Claims 9-13, 22-41, 62-69, 89-108 & 127-150 are rejected under 35 U.S.C. 103(a) as being unpatentable over W. Fuller, in view of Songer, (U.S. Pat # 5,696,560), Banker & Chadda.

Considering claims 136 & 143, the claimed apparatus and method for distribution of digitized image to viewing locations, comprising:

*'a central facility for receiving and storing digitized audio & video data'*, is met by the video server 202, see W. Fuller, Fig. 4 & Fig. 6; col. 11, lines 65-67 thru col. 12, lines 1-11.

As for the claimed *'means for encrypting, compressing and transferring the encrypted compressed audio & video data to a plurality of auditoriums'*, W. Fuller teaches compression but not encryption. Nevertheless, Banker teaches using cryptography in the transmission of video data, (col. 1, lines 37-67). It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify W. Fuller to use encryption as taught by Banker, at least to ensure the reception of programming only by authorized subscribers.

Regarding the claimed *'plurality of auditoriums'*, W. Fuller does not discuss auditorium. However, Songer teaches the distribution of movie(s) to theaters to be displayed to an audience, (Fig. 1). It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify W. Fuller to transmit the video data to a cinema, as shown by Songer, at least in order to provide the movie to a wider range of people simultaneously.

The claimed feature of pre-selected times reads on the disclosure of W. Fuller of a subscriber selecting movies from a schedule of times, col. 10, lines 52-57.

*'the at least one compressed and encrypted image file and the plurality of compressed encrypted audio files are associable using **at least one identifier** for each of the encrypted image file and the plurality of audio files'*, emphasis added, reads on the frame sequence number, time stamp used to synchronize the audio & video, Chadda, col. 8, lines 47-58; col. 12, lines 50-67. Furthermore, since the audio & video information is transmitted as MPEG stream, it would have been obvious for one of ordinary skill in the art to use the well-known MPEG protocol/labels of program\_ID or event\_ID, in order to associate the corresponding audio & video with a particular program, including header information that identifies them with a particular program. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify W. Fuller with feature of an associated identifier, for linking audio & video components, at least for the benefit of ensuring the audio component is played with the correct corresponding video component.

Considering claims 9-10, the subject matter reads on Chadda, Fig. 1.

Considering claim 11, see Chadda, col. 2, lines 55-67..

Considering claim 12, Songer discloses using telecine technology, col. 4, lines 65-67.

Considering claim 13, Chadda teaches a computerized workstation, SparcStation 20, col. 14, lines 44-50.



Considering claim 22, W. Fuller teaches transmission of data over a satellite connection to the video server, but does discuss wireless distribution within the site, even though Ethernet LAN technology is taught. Official Notice is taken that wireless LAN technology was known in the art at the time the invention was made. It would have been obvious for of ordinary skill in the art at the time the invention was made, to operate W. Fuller using a wireless LAN technique, at least for the known benefit of a more portable system.

Considering claims 23, W. Fuller meets the claimed subject matter.

Considering claims 24-25, MPEG may be compressed at different rates.

Considering claims 26, 28, 93 & 95 Official Notice is taken that numerous error detection algorithms, such as adding a checksum to transmitted data, and allowing adjustments in transfer characteristics was old in the art at the time the invention was made. It would have been obvious for of ordinary skill in the art at the time the invention was made, to operate W. Fuller in manner wherein checksum technology and adjusting terminal parameters were used, in order to ensure video data is correctly received by the receiving system.

Considering claim 27, W. Fuller discloses the use of satellites in order to transmit video data, see Fig. 1.

Considering claim 29, W. Fuller discloses a two-way system.

Considering claims 30 & 97, while teaching scrambling, does not teach receiving encrypted data a separate time from the audio/video. Nevertheless, Banker discloses transmitting a session key at a time separate from the encrypted information, col. 1, lines 37-67. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify W. Fuller with the feature of transmitting decryption or cryptographic key information at a separate time from the audio/video information, as taught by Banker, at least to ensure that the information is at least received before the actual encrypted data.

Considering claim 31-32, W. Fuller does not teach the well-known flow control technique of request for re-transmission of data due to errors. However, Official Notice is taken that request-retransmission was very well known in the art at the time the invention was made. It would have been obvious for of ordinary skill in the art at the time the invention was made, to operate W. Fuller in a manner utilizing the request retransmission technique, at least for the known benefits of an efficient protocol for ensuring the receiver only decodes image data above a certain threshold.

Considering claims 33-35, the claimed subject matter reads on the system control computer 206 and video server 202, see Fig. 2 & Fig. 4 of W. Fuller.

Considering claims 36, W. Fuller teaches the use of MPEG data, which reads on packet type data.

Considering claims 37 & 104, Official Notice is take that Internet communication was well-known in the art at the time the invention was made. It would have been obvious for of ordinary skill in the art at the time the invention was made, to operate W. Fuller by transmitting audio/video files over the Internet, at least for the known benefit of a greater degree of flexibility in the source of the source of the programming and interactive features associated with the Internet.

Considering claims 38-39 & 96, 100-102, W. Fuller & Songer only explicitly disclose that the satellite system delivers video data to the subscriber. Official Notice is taken that at the time the invention was made, two-way satellite systems were well known in the art. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify W. Fuller to deliver upstream traffic over a satellite system, at least for the advantage of a higher bandwidth channel that the return data from subscribers at a higher speed.

Considering claims 40-41, the claimed network management system that present images at authorized times and provides operational control of the auditoriums, reads on the operation of W. Fuller.

Considering claims 62-63, W. Fuller teaches the optional use of fiber optic technology, col. 9, lines 61-63.

Considering claim 64, both Songer and W. Fuller teach satellite transmission.

Considering claims 65, Songer teaches that movies may be distributed on a transportable medium, col. 4, lines 58-60.

Considering claims 66-67 & 130-131, Official Notice is taken that at the time the invention was made, it was well known in the art store and transport video data on optical and magnetic media, It would have been obvious for one of ordinary skill in the art at the time the invention was made, to store and transport video data on magnetic or optical media, at least for the benefit of a higher storage capacity than tape, which is discussed in Songer.

Considering claims 68-69 & 132-133, the claimed '*archiving medium*' reads on the video server 202, in W. Fuller and the recording medium 68 in Songer.

Considering claim 89, Songer teaches the use a satellite to transfer audio/video to movie theaters, col. 4, lines 55-65.

Considering claims 90, Songer & W. Fuller meets the claimed subject matter.

Considering claims 91-92, Chadda teaches the different compression rates, col. 8, lines 46-67; col. 11, lines 25-52.

Considering claim 94, Songer discloses the use of satellites in order to transmit video data, see Fig. 1.

Considering claim 98-99, Songer does not teach the well-known flow control technique of request for re-transmission of data due to errors. However, Official Notice is taken that request-retransmission was very well known in the art at the time the invention was made. It would have been obvious for of ordinary skill in the art at the time the invention was made, to operate W. Fuller in a manner utilizing the request retransmission technique, at least for the known benefits of an efficient protocol for ensuring the receiver only decodes image data above a certain threshold.

Considering claim 103, W. Fuller teaches the use of MPEG data, which reads on packet type data.

Considering claims 105-106, Songer only explicitly discloses that the satellite system delivers video data to the subscriber. Official Notice is taken that at the time the invention was made, two-way satellite systems were well known in the art. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Songer to deliver

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upstream traffic over a satellite system, at least for the advantage of a higher bandwidth channel that the return data from subscribers at a higher speed.

Considering claims 107-108, the claimed network management system that present images at authorized times and provides operational control of the auditoriums, reads on the operation of central site 2, which controls the distribution of video data to a plurality of movie theaters 6, col. 4, lines 46-53.

Considering claims 127-128, W. Fuller teaches the optional use of fiber optic technology, col. 9, lines 61-63.

Considering claim 129, Songer teaches that movies may be distributed on a transportable medium, col. 1, lines 15-40.

Considering claim 134, Banker discloses transmission over a cable network.

Considering claim 135, the claimed redundancy reads on the disk array 610 of W. Fuller.

Considering claims 137 & 144, Songer, while teaching scrambling, does not teach receiving encrypted data a separate time from the audio/video. Nevertheless, Banker discloses transmitting a session key at a time separate from the encrypted information, col. 1, lines 37-67. It would have been obvious for one of ordinary skill in the art at the time the invention was made

to modify W. Fuller with the feature of transmitting decryption or cryptographic key information at a separate time from the audio/video information, as taught by Banker, at least to ensure that the information is at least received before the actual encrypted data.

Considering claims 138-139 & 145-147, Banker teaches that the system includes a time interval for use of the session key, which avoids the receiver having indefinite access to encrypted data, see col. 2, lines 24-665 & col. 3, lines 5-30 & col. 4, lines 40-58

Considering claim 140, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the combination of W. Fuller & Banker to overwrite invalid decryption key information for the desirable advantage of re-using its memory, thereby conserving storage capacity at the receiver.

Considering claim 148, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the combination of W. Fuller & Banker to overwrite invalid decryption key information for the desirable advantage of re-using its memory, thereby conserving storage capacity at the receiver.

Considering claims 141, 142 & 149-150, Official Notice is taken that watermarking was known in the art at the time the invention was made. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify W. Fuller to use watermarking and the time of presentation of the watermarking, as an additional security feature.

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